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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,603	10/17/2003	Don Zoran	K8000275US	9119

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EXAMINER

CADUGAN, ERICA E

ART UNIT PAPER NUMBER

3722

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/686,603

Applicant(s)

ZORAN, DON

Examiner

Erica E Cadugan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/6/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 1A and 1B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (as explicitly set forth in paragraph 0005 of the specification). See MPEP § 608.02(g).
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

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The oath or declaration is defective because:

It does not identify the mailing (i.e., post office) address of each inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

Claim Objections

4. Claim 7 is objected to because of the following informalities: in line 3, it appears that —other—should be inserted after “each”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-8, 10-16, 18-19, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application Publication 2002/0081956 to Bennett et al.

Bennett et al. teaches a machine tool in the form of a polishing device (see paragraph 0006 for example). An isometric view of such a polishing device is shown in Figure 1, wherein 60 is a multi-head carousel including a plurality of carrier heads 100 on which workpieces 10 to be polished are mounted (see Figure 1). Also, on tabletop 23 are located a plurality of polishing stations 25a-c, each mounting a circular polishing pad 32 (Figure 1).

Of particular interest is the embodiment of Bennett’s invention shown in Figure 3, which shows a detailed cross-sectional view of a carrier head as in Figure 1, and including a retaining ring (see paragraphs 0020-0022).

Note that the carrier heads 100 can be considered “components” as set forth in the claims. Broadly speaking, these carrier heads or “components” must “cooperate with” each other in order to function properly to ensure polishing of the workpiece, e.g., at least cooperate by operating in the proper sequence, etc.

As shown in Figure 3, note that rigid rings 203 and 184 are considered “constituent parts”, between which, in what is broadly considered a “slot” or “aperture”, is sandwiched planar PVC damping material 200 (paragraphs 0041 and 0032).

Re claim 8, note that paragraph 0056 explicitly teaches that the “constituent parts” 184 and 203 may be “manufactured from aluminum or any other material that provides a suitable amount of stiffness to the retaining ring”.

Re claim 10, note that there are a plurality of the heads 100, and thus a plurality of the described “constituent parts”.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0081956 to Bennett et al. as applied to claims 1, 8, 10, 16, and 18 above.

Bennett et al. teaches all aspects of the present invention as set forth in the above rejection based thereon. However, while Bennett does teach that the “constituent parts” 184 and

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203 may be “manufactured from aluminum or any other material that provides a suitable amount of stiffness to the retaining ring” (paragraph 0056), and even provides an explicit teaching that the “constituent part” 184 may be made of steel (paragraph 0056), Bennett does not explicitly teach that both constituent parts 184 and 203 are made of “steel”.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the “constituent parts” 184 and 203 out of whatever known material, including steel, of the desired stiffness as was desired or expedient (particularly since Bennett explicitly teaches that the materials of 184 and 203 can be made from “any” material “that provides a suitable stiffness to the retaining ring” and further teaches that 184 can be made of steel, and thus, it is implicit that steel provides a “suitable stiffness” or else it would not be an acceptable material for element 184 as described in paragraph 0056), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. See also Ballas Liquidating Co. v. Allied industries of Kansas, Inc. (DC Kans) 205 USPQ 331.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Particularly note that U.S. Pat. No. 5,096,348 teaches planar damping material sandwiched between relatively sliding parts of a machine tool (see Figure 3 and also col. 3, lines 21-29, for example).


Faxing of Responses to Office Actions and Contact Information

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10. In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing of responses to Office Actions directly into the Group at (703) 872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on Monday through Thursday from approximately 7:30 a.m. to 5:00 p.m., and every other Friday from approximately 7:30 a.m. to 4:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A.L. Wellington can be reached at (571) 272-4483.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Erica E Cadugan
Primary Examiner
Art Unit 3722